

practical good would be effected by the higher point of springing of the pointed arches, in giving more head-room for craft near to the piers; and as the Westminster-bridge arches have less space for navigation than any of the fourcity bridges, any increase of accommodation is desirable; unfortunately, however, while an addition is thus made for one-fourth of the width of the arch near the springing, a portion is taken away from the height of the remaining three-fourths, nearest the crown, where it is of the greatest importance; this diminution varies from 18 inches to 30 inches, so that the centre arch will not then have more height for navigation than the two arches adjoining the centre arch now have; and when we inform you that at high water of good tides the centre arch is the only one which some of the steamers can conveniently pass under, we think you will allow with us, that the proposed lowering will, in such cases, be rather a practical evil, as it will take from the convenience of what is now the least convenient bridge for navigation, to say nothing of the liability to the ribs being injured by masts and chimneys striking them.

"The artistic point of view is the last insisted on by Mr. Barry; and on this, what we may say is with due respect to his better judgment and taste in matters of architecture. The contract with Mr. Cubitt does not alter the present elevation below the crown of the arches; but, as you are aware, we have long since suggested that a new elevation for the bridge after the Norman style would be a great improvement. In this, however, we would not propose to reduce the magnitude of the features of the bridge, considering, that simple boldness and strength are essential qualities in a bridge over the River Thames, in London; and if so, that it is scarcely fair to alter the parts of the bridge because those of the elegant florid edifice which is now being erected near it, are small. For palace architecture, the latter may be the best, and we do not venture an opinion as to the effect of Mr. Barry's great work, in which our professional employment was confined to the construction of the efferdum and the river wall; but for a bridge, particularly in a city, with constant and heavy rough trade under and over it, the style of architecture ought, we consider, to be more masculine. May not the new Houses be better displayed thus, than by acceptance of style? The beauty of the detail of the new Houses is very great; the length 800 feet, without at present any striking feature or variety, also great; but we submit, whether an additional 800 feet of according composition and style, of still lower elevation, would not rather tend to render the ensemble dull and flat than effective? The style of the new buildings must stop somewhere. Can it do no better than at the bridge, which, as we have already said, appears to require a character different from the Houses of Parliament? If both faces of the arches are proposed by Mr. Barry to be alike, would there not be a want of accordance between the north face of the bridge and the buildings and mansions near to it, which there is, we presume, no intention of altering? Is a continuance of the same style required for so great a length as the Houses and the bridge together, although the 'pointed' may be the prevailing character of the building? Does not precedent reply to this the negative, and prove it, by the fact that the periods of the new Houses are made of the additions that have from time to time been made to some of our finest buildings may be discovered by the style; the Saxon, the Norman, the pointed, and varieties of each being found in the same building, and yet the ensemble not inharmonious. We hope, therefore, that the superstructure of the bridge, though it may be different in style from the Houses of Parliament, may not be discordant.

"Westminster-bridge has been where it is, and as it is, for a century; it was there when the design for the new Houses were made, and we never heard that to pull down Westminster-bridge to nearly low water was to be a necessary accompaniment to the adoption of any of the designs. If you and the other Commissioners had known that such alterations were contemplated, you would not, we are sure, have allowed the works to have proceeded as they have done, until nearly two-thirds of the whole to above high water had been completed, including the renewal or repair of the arch stones.

"We may name here an objection to the

form which Mr. Barry has proposed for the arches, as tending to lessen the stability of the bridge. Labely considered that by adopting the semi-circular arch, which presses vertically upon its piers, each pier might be considered an abutment, so that if one arch were to give way, the piers would support all the rest. From the greater height at which the proposed pointed arches spring from the piers, and their greater lateral pressure or thrust upon the piers, the above would not be the case. On the contrary, the failure of one arch would, we conceive, cause the destruction of all the piers and arches. This consideration is not to be disregarded in a bridge the piers of which have been so badly founded, that to support them has been a constant expense, and is at this moment a source of considerable anxiety, although the works we have in hand, if as successful as hitherto, will render the piers much more secure than they have ever been; we hope perfectly so.

On the whole, therefore, we have reason to be pleased that Mr. Barry approves the various improvements in the bridge which the Commissioners have contemplated, and with one exception, contracted for. The only addition he makes to them is the substitution of the pointed arch, which, for the reasons stated, we cannot advise. We agree to the advantage, in point of taste and utility, of keeping the roadway of the bridge low; we have designed doing this as far as can be done, having regard to the funds of the Commissioners, and therefore without disturbing the present arches. There is a way by which the height of the roadway might be reduced below what either Mr. Barry or we have yet proposed, at one-fourth of the expense of his plan (which would, we think, much exceed his estimate), and without lowering the soffits of the arch, or diminishing in any way the convenience of navigation; but we avoid entering upon, or committing ourselves to this, until we have considered the subject more in detail, and understand it to be the wish of the Commissioners that we should do so; for the works we have already recommended may go as far as their unassisted funds would justify.

"We have the honour to be, Sir,
"Your obedient servants,
"WALKER AND BUNNELL.
"The Right Hon. Charles S. Lefevre,
"Speaker of the House of Commons,
"Chairman of the Commissioners of
"Westminster-bridge."

In our next number we shall give Mr. Barry's reply, and shall ourselves make some observations on the purpose.

THE TOWER OF LONDON.

EXTENSIVE alterations and improvements are to be made at the Tower, which was recently visited by the Duke of Wellington. His Majesty's chief officer, or constable, preparatory to their commencement. His Grace made a minute survey of the buildings and localities, attended by Captain Erlington. The two archways contiguous to the Salt Tower, at the eastern extremity, near the St. Catherine's Dock, and the houses extending in a northerly direction opposite to what are called the Irish barracks, are to be pulled down, in order to widen the thoroughfare for foot passengers and carriages. The tenements to the westward, now occupied by some of the warders and residents of the Ordnance Department, and which are situated in the rear of the Small Armoury, are likewise to be razed. On their site are to be erected barracks of sufficient magnitude to accommodate one thousand men; the Map Tower is to be converted into officers' barracks. The Beauchamp Tower, or State Prison, which is at present the mess-room of the officers of the battalion of Guards on Tower duty, is to constitute the new Small Armoury, to be placed in charge of the warders, and to be opened to the public. The eastern barracks will form the northern side of a new square, and face the White Tower; the main square will consist of the officers' barracks in rear of the Irish barracks. The intervening space is to be made into an esplanade for the recreation of the troops. The moat having been drained and levelled to low water mark, is to be planted with trees and evergreens (which latter are to be trained up the walls of the fortress to conceal them from the eye), and used for pleasure grounds and the occasional exercise of the men.

THE NEW ROYAL EXCHANGE.

THE following are said to be the heads of the information contained in the last report sent in by Mr. Tite, the architect of the new Royal Exchange, to the Joint Grand Committee for Gresham Affairs:—

It states that, with respect to the external works, the grasshopper vane, repaired and regilt, was deposited in its place on the 8th of December last; that the tower was completed to the cleaning down of the stonework, a process which will be effected as the scaffolding is being removed. At the west facade the columns and architraves of the great Venetian windows have been set, and the carved shields and festoons over the opening and over the whole of the central arch have been finished.

As to the internal works, the report touches first upon the basement, and states that the vaults over the basement have been completed, with the exception of an arch which is to be formed under the staircase leading to Lloyd's. In the London Assurance portion of the building, on the one-pair floor, the whole of the fire-proof arches have been turned, and the joints and partitions in the eastern end are in their places. In other parts the plates are laid. On the two-pair floor the joints have been laid all through. The roof has been nearly completed, both plumbers' and slaters' work being almost wholly finished.

In the Royal Exchange ground-floor the fire-proof arches have been turned throughout, and the joints and partitions have been nearly all deposited in their places. In this two-pair floor the joints have been all laid and the quartering is in a forward state. The leadwork to the roof of the portico has been within a third completed, and this department will require very little more labour generally.

In the unappropriated room on the one-pair floor the fire-proof arches have been completed as well as the joints and partitions. In the two-pair floor similar progress has been made.

In Lloyd's room on the one-pair floor all the fire-proof arches have been turned. The reading-room and other rooms on each side of the tower remain in the same condition in which they were represented to be at the time the last report was made. In the roof the plumbers' and slaters' work is throughout exceedingly forward, and but little remains to complete that portion of the work.

With regard to the sculpture, Mr. Tite expresses his satisfaction at being able to report that every figure has been transferred from the model to the stone, and that a month's labour will complete the work, so that it will be ready for housing within that period. When the sculpture shall have reached its appropriate position, the finishing touches will be given to it by the sculptor. Judging from its present advanced state, the architect entertains no hesitation in assuring the committee, that if necessary, it could all be in its place and completely finished within two months from the stated date.

The dials and hands of the clock have been prepared, and will be placed as soon as the scaffolding has been sufficiently removed to enable the men to place them with safety. The machinery of the clock is very nearly completed, and the only thing remaining unsettled is the arrangement with respect to the actual tones of the chimes. Upon that subject Mr. Tite had consulted Professor Taylor, the Gresham Lecturer on music, and he hoped that before the next meeting of the committee he should be prepared to report the result. The moulds for some of the bells have been prepared, and in the course of a month several of the bells will be cast. Mr. Tite concludes with congratulating the committee, at the close of the third year of the work, on the generally favourable state of the seasons throughout the whole period. The mildness of an winter, and the unusually fine spring, which followed, were greatly in favour of building operations, and though the early part of the summer was wet, yet since August up to the present time scarcely a day has been lost by interruption from the weather. He could see nothing at present, unless some unusually severe weather should occur after Christmas, to prevent the realization of his hopes that the contract would be completed within the time originally agreed upon.